ABSTRACT

The present invention discloses an optical information recording method of an optical information recording and reproduction device that uses a semiconductor laser to record or reproduce data in an optical disk. Based on a detected value of an optical path difference of the optical disk, a calculated value of optimum recording power for recording data or an object value of recording power when data are being recorded is corrected. In addition, when calculating the optimum recording power before recording data in the optical disk, an optimum index (β) indicating the optimum recording power is corrected with respect to a predetermined first index, and the corrected optimum index is used as the calculated value of the optimum recording power Pwo. The predetermined first index is obtained by reproducing a trial write region which is recorded with recording power being varied stepwise.